Journal of Emerging Trends in Economics and Management Sciences (JETEMS) 5(5):480-489
© Scholarlink Research Institute Journals, 2014 (ISSN: 2141-7024)
jetems.scholarlinkresearch.com

The Occurrence of Brain Drain in Malaysia: Perceptions on to Work or not to Work Overseas in the Future

Mastura Ab. Wahab
School of Management
Universiti Sains, Malaysia.

Abstract
Brain drain is the movement of highly-skilled workers from less developed countries to more developed countries due to economic, political, social or personal reasons. Many negative impacts are associated with the brain drain particularly on the people of the country and its economic development. In the case of Malaysia, factors such as better pay and perks, job opportunity, career advancement and social injustice were amongst the reasons many Malaysians migrated overseas. In efforts to curb further brain drain, the Malaysian government has put in strategies to try reversing this problem. In this study, 100 students were sampled to examine their intention to work overseas or local. Brain drain happens when students decided to work overseas, therefore taking students as samples would provide further insights into the knowledge on the trends of future brain drain. The results support the study hypotheses that students' intention to work overseas are due to the push and pull factors such as better salary and compensation, economic condition, family influence and career satisfaction. The results also show that the direction of this relationship can be changed with the help of the reverse push factors.

Keywords: brain drain, reverse brain drain, Malaysia, overseas, push and pull factors

INTRODUCTION

The emigration of highly-skilled workers, more commonly referred to as the brain drain (Haylock, 2005; Baruch, Budhwar and Khatri, 2007; Wild, Wild and Han, 2010; Foo, 2011) has become a viral headlines and attracted numerous attentions from academics, researchers, pundits, economists and also government policy makers. It is a major concern because of the outflow of talented or educated human capital from less economically advanced countries to more economically developed countries (Geeson, 1998, Baruch et al, 2007; Crush, 2002; Panahi, 2012; Tavakol, 2012) will leave the country with the exodus of talent losing all of its inner strength due to scarcity of skilled domestic workforce.

Brain drain is a global phenomenon and about 1.5 million professional migrants from just developing countries in the industrial countries (Tavakol, 2012). The Wold Bank (2011) defines the brain drain as the migration of the talent across borders. Oxford Dictionary (2014) further elaborates on the term to refer to the loss of academic and qualified personnel because of their migration. Overall, brain drain is viewed as the movement of highly-skilled workers from the developing countries to the developed countries to find greater opportunities, living conditions and lifestyles (Tansel and Gungor, 2003; Wild et al, 2010; Haylock, 2005; Baruch et al, 2007; Korner, 1998; Iredale, 1999; Panahi, 2012).

In the study of brain drain, the most cited reasons for its acceleration are the push factors in the emigrants' countries and the pull factors in the developed countries that cause them to want worked overseas (Lewin, 1951; Baruch, 1995; Baruch et al, 2007). Lewin's (1951) field theory indicated that when people experience contradictory forces within their own country, they will seek to move to a different country.

The Issue of Malaysia Brain Drain

The issue of brain drain has long been a subject of debate and controversy. Malaysia is no exception to this issue. The brain drain facing by Malaysia is very severe as indicated in The Star (9 July, 2007) especially in the area of skilled labor and professional. According to Malaysia Economic Monitor (2011), the numbers of skilled Malaysians living abroad have tripled with two out of every 10 Malaysians with tertiary education opt to work overseas especially to the Organization Economic Cooperation and Development (OECD) countries or Singapore. There are currently about one million Malaysians residing overseas and 308, 833 of them are highly-skilled workers (The Malaysia Insider, July 7, 2014). Many different factors caused the students to stay and work overseas after finishing the studies ranging from individual, political or economic reasons. For example, many Malaysians especially those in accountancy field preferred to work overseas such as Australia because of higher pay and better perks offered by companies overseas (The Star, July 9, 2007). Malaysian accountants are also of the high demands overseas due to their abilities and flexibilities to adapt and work in different environment as well as fluent in many languages (The Star, May 15, 2008; Junaimah and Yusliza,

2011). Amongst the top three drivers of Malaysia's brain drain as indicated in Malaysian Economic Monitor (2011) were career prospects, compensation and social justice. The latest survey done by Randstad Workmonitor (2012) on the brain drain in Malaysia reported 62% of the Malaysian employees considered good salary as more important than their job satisfaction and 50% of them believed they work to live instead of live to work. Furthermore, many reports on Malaysia's brain drain such as Starbizweek (2011a and 2011b), Ravendran (2008), Javed, (2011), Wong, (2010), The World Bank (2011) indicated various reasons but the most cited reasons were salary and compensation, professional development, and social justice.

Successful Cases of Reversing The Brain Drain

India and China are two emerging economic countries have been successfully attracting their students to return home after finishing studies (Baruch et al, 2007) thus reversing brain drain effect on the countries. The majority of students from these countries preferred to return homes to their respective countries due to strong labor markets in China and India (Bjorkman and Fan, 2002; Ghoshal, Piramal and Budhiraja, 2001) as well as rapid increase in salary packaged offered to talented graduates (Mittal, 2005; Ryan, 2005, Baruch et al, 2007).

In the case of Malaysia, the government has set up TalentCorp on 21 January 2011 in its attempt to reverse the brain drain. The aim was to formulate and facilitate initiatives to address the availability of talent in line with the needs of the country's economic transformation (TalentCorp, 2011). It was also intended to collaborate closely with relevant Government agencies and industries in priority economic sectors. With the establishment of TalentCorp (TalentCorp, 2011), Malaysia aimed to develop demand-driven initiatives in order to enhance graduate employability, promote talent diversity, engage with Malaysians abroad and facilitate foreign talent. There were also programs and incentives to encourage Malaysian professionals working overseas to come home and help drive the nation's economic transformation **(**The World Bank, 2011**).** Another effort to reverse the brain drain done by the Malaysian government was transforming the education system. As indicated by Baruch et al, (2007), one of the major causes of brain drain was education in which the students initially left their developing countries to the developed countries to study before they decided to stay and work after finishing their studies. Therefore, in order to reverse the problem, the Malaysia government have invested on providing better education facilities, upgrading many colleges and institutes to the university level, encouraging more lecturers to have PhD degrees and providing significant numbers of scholarships and loan for people to further their studies locally. Either the students stay and work after finishing their studies overseas or students who finished their studies locally migrate overseas to find better jobs, both will result in brain drain. Therefore, it is imperative to find out the students' intention to work overseas as this will determine the starting point of the future brain drain. The present study examines the university students' intention to work overseas in relation to push and pull factors as well as the reverse push factors from the home country.

RESEARCH OBJECTIVES

The research objectives of the study are twofold. Firstly, it sets out to examine the students' intention to work overseas versus local. And secondly, the present study aims to investigate the effect of the students' intention to work overseas versus local in regards to the push and pull factors as well as the reverse push factors.

EXISTING LITERATURE AND RESEARCH

Many studies agreed that the brain drain has negative impacts to the developing countries (Baruch et al, 2007; Maimunah, Kunasegaran and Roziah, 2014; Lowell ad Findlay, 2001). Brain drain makes developing countries less competitive as the skilled and best human capital flowed out of the countries to the developed countries (Geesen, 1998; Baruch et al, 2007). It is crucial if this outflow of talents is not being replaced with inflows, the quality and the narrow based skills will be at stake (Schellekens, 2011).

Numerous researches explained the factors for the occurrence of the brain drain based on Lewin's (1951) field model. According to this model, the conditions existed in the home countries pushed the people to migrate to the more developed countries to find better living conditions. However, the push factors alone were not the sole contributing factors that drove people to migrate but it was intensified by the pull factors of better conditions and higher pays that seemed satisfying to their needs which existed overseas pulling them to migrate. On the other hand, the intention of people to migrate or not can be best explained by the theory of reason action (Ajzen and Fishbein, 1980; Fishbein and Ajzen, 1975). This theory was useful to predict people actual actions based on their intention. According to Ajzen (1991), the intention to perform behaviour will be higher when the individual has a positive evaluation about performing it (Ajzen, 1991; Khalil and Pearson, 2006). Figure 1 depicts the Fishbein and Ajzen theory of reason action or theory of consistency.

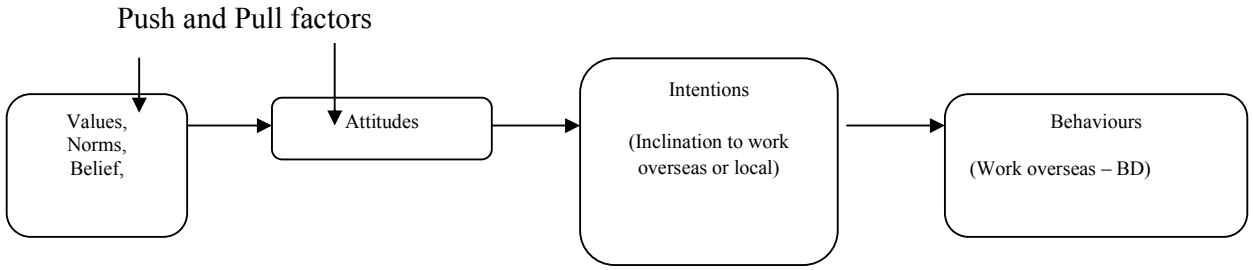


Figure 1: Fishbein and Ajzen Theory of Reason Action/ Consistency Theory for Working Overseas

PUSH AND PULL FACTORS

A variety of factors attract people to work overseas. The most cited factors influences people to migrate arise from within the source countries (*push factors*) which facilitate individuals' decisions to migrate are normally economical (low wages, unemployment), social (low education, bad living and working conditions), political (political instability, persecution) and personal (cultural pressures, religious and ideological discrimination) (Tavakol, 2012). According to Lowell and Findlay (2001), better wages and employment condition, better information, recruitment and cheaper transportation are the factors that encourage the skilled workers to seek jobs and opportunities in the developed countries. Compensation scholars such as (Gerhart and Milkovic, 1992; Deckop, 1998, Murphy, 1999) indicated better compensation as the main factors that facilitate people decision to work overseas. A study by Zimmerman (1987) also showed that economic and social forces within the home countries serve to push people to find jobs abroad. Sometimes the reason can be as simple as the dissatisfaction with their working conditions in comparison with their managers (Brockhaus, 1980) can lead employees to look for jobs overseas. According to Lowell and Findlay (2001), migration is primarily a response to globally uneven development which usually explained in terms of such factors as low wages, few incentives or poor working conditions. It is common for people with highly skilled and education to migrate to countries where conditions for scientific, technological and professional work are easier to access (Tyson, 2011; Portes, 1976; Winston, 2014).

THE PUSH AND PULL FACTORS IN MALAYSIA

In the case of Malaysia, the top three factors that drove Malaysians to work overseas were career prospects (66%), social justice (60%) and compensation (54%) (The World Bank, 2011). It was found that many Malaysians work in Singapore (54%), Australia (15%), the United States (10%) and the United Kingdom (5%) (The World Bank, 2011). Singapore was the most popular destination for many Chinese Malaysians to work due to several reasons such as closer physical proximity to Malaysia, higher salary and compensations, more favourable treatment from their Chinese government, and also higher currency exchange. The sectors that were badly affected by the Malaysia's brain drain included accountancy, engineering, medical and architecture (Junaimah and Yusliza, 2011; The New Straits Time, Sep 8, 2007). According to The Malay Mail (27 May, 2014) and Ang (2012), many Malaysians who seek employment opportunities abroad cited the less attractive salary and benefits offered in Malaysia as one of the main reasons for their working overseas. There were reports which mentioned the reasons people left to work overseas due to rigid bureaucratic and unresponsive government, controls personal freedom, racial antagonism and religious divide (Starbizweek, 2011c; Quah et al, 2014), however, the trends seem to be more of economical and better living conditions as the majority of the people migrated to the more developed countries that have higher pay and better career opportunities than to the countries which have higher human right consideration such as Switzerland or Germany.

India and China as Examples of Successful Reversed Brain Drain.

Developing Asian countries, such as South Korea, Taiwan, China, and India, have successfully transformed their "brain drain" experience to "brain gain" (Maimunah et al, 2014). Using India as an example, where many of its Information Technology specialists have returned homes where the economies are booming and their skills are in great demand (The Business Week, August 22, 2007; Gupte and Jadhav, 2014) thus reversing the occurrence of brain drain in India. Reverse brain drain as cited in Gupte and Jadhav (2014) is a form of brain drain where human capital moves in reverse from more developed countries to lesser developed countries that are developing rapidly. Reverse brain drain can occur when the skilled workers and professional such as scientists or engineers return to their home countries after several years of experience working overseas. The reverse brain drain or also called brain circulation or brain gain also can happen if the push and pull factors that led to high-skilled workers to migrate in the first place are reversed. For example, in India, the push factors that led many of its workers to migrate were better economic growth standards of living and also economic opportunities and the pull factors that ignited many Indians to want working overseas even more were the host countries

hospitable procedures such as less strict granting of Visas to students and work permits (Gupte and Jadhav, 2014). When the push and pull factors between the host and home countries meet at the breakeven points, many migrants want to return home. With the stricter migration regulation overseas and rapid economic opportunities in home countries, these become the factors that pull many Indian workers back to their home countries after spending time working overseas (Gupte and Jadhav, 2014).

China, on the other hand seemed not to worry about its brain drain despite the fact that it is supplying most of the world's highly skilled migrants (Xue, 2012; Zeithammer and Kellogg, 2010). According to Xue (2012), many Chinese graduates return home after finishing their studies overseas has witnessed a large backflow of overseas talent to China. In 2010, 32.6% returned home after left the country studying overseas as compared to 28% and 25% in 2008 and 2006, respectively (Finn, 2010; Xue, 2012).

Malaysia Efforts to Reverse the Brain Drain

Malaysia is now trying to emulate the efforts of these two succeful nations in reversing its brain drain occurrence. Malaysian population in total as on April 2013 was 29,620,200 (The Department of Statistics Malaysia, 2013). Out of this number, Malays were 62.3%, the Chinese 22%, the Indians 6.7%, other races (citizens) 0.9% and non-citizens at 8.1%. Several reports have indicated that the main and important factors that push and pull Malaysians to work overseas were of economic reason. For example, Ravendran (2008) reported that Malaysian migrated to the United Kingdom and Australia were due to the pull factors such as better pay packets, better work life balance and better quality of life. Wong (2010) also identified job prospect as the main pull factor of Malaysia's brain drain among students studying overseas. Similarly, Foo (2011) indicated better career prospects overseas and attractive salary/benefits overseas as the main two pull factors of Malaysia's brain drain.There were other studies which cited other reasons such as Zigura dand Law (2009) who cited limited career opportunities in the government and public education institutions as the push factors of Malaysia's brain drain among Chinese and Indian Malaysians. The World Bank (2011) has also cited other reasons such as lack of access to high quality of education and social injustice but this report and many other reports highlighted more on less attractive salary/benefits and lack of career prospects or opportunities as the main push factors of Malaysia's brain drain.

The Malaysian government has put in many strategies to try reversing this brain drain. Starting with "calling back Malaysian expertise to return to its homeland" (Maimunah et al, 2014) to the setting up TalentCorp where it included the introduction of flexible work option such as compressed work week, flexi hours, job share and also working from home for female employees (The Malay Mail, 27 May, 2014). The company who implemented these flexible work arrangements were given incentive such as tax deduction indicated in the Malaysian 2014 Budget. Another effort was through a program called 'FasTrack', a 12 month appreciceship program in which newly graduate students in Electronics and Electrical field were fastracked and trained as R&D engineers in the organizations (The Malay Mail, 27 May, 2014). Through this program, TalentCorp planed to bypass and curb further occurence of brain drain. Based on the report which indicated that many Malaysians who have been working overseas for 10-20 years actually wanted to come home and serve the nation, but due to the difficulty in adjusting to the Malaysian environment and also due to their reluctant to start over in lower postions compared to those who stayed from the start, forced them to stay overseas (The Malaysian Reserve, July 7, 2014; Talent Corporation, 2012). By developing and retaining the local talents to work in Malaysia and by giving better incentives would better induce them to serve the country. Also, in an effort to encourage the skilled workers to return home, TalentCorp has introduced a program called Returning Expert Programme (REP) where incentives were given to lure back Malaysian working overseas to come home (The Malaysia Insider, 7 July 2014; Talent Corporation, 2012). In addition to calling back Malaysian expertise, the Public Service Department (PSD) sponsored scholarship holders under a STAR package. STAR enabled PSD scholars to serve their scholarship bond in the private sector (Maimunah et al, 2014). Not just focused on Malaysians working overseas but the programs also encompassed on retaining top foreign talents from leaving the country. This was done by imposing fewer restrictions in order for foreign workers to continue working in Malaysia for longer tenure (The World Bank, 2011; TalentCorp, 2012). The strategies looked promising, but the results are yet to be seen. According to Schellekens (2011), the targeted measured done by Talent Corp are helpful but they also could backfire if underlying deterrents are not addressed comprehensively.

By examining students' intention to work overseas or local, can provide some insights into whether the brain drain will be continuing in the future or starting to reverse. Students are the key sources of any nation building and also the contributing factors of the brain drain across the world. A moderate level of brain drain is expected for students to gain experience and to set up their global networking, but with the hope they will come back to serve the nation subsequently. Therefore, the proposed research model for the present study is presented in Figure 1.

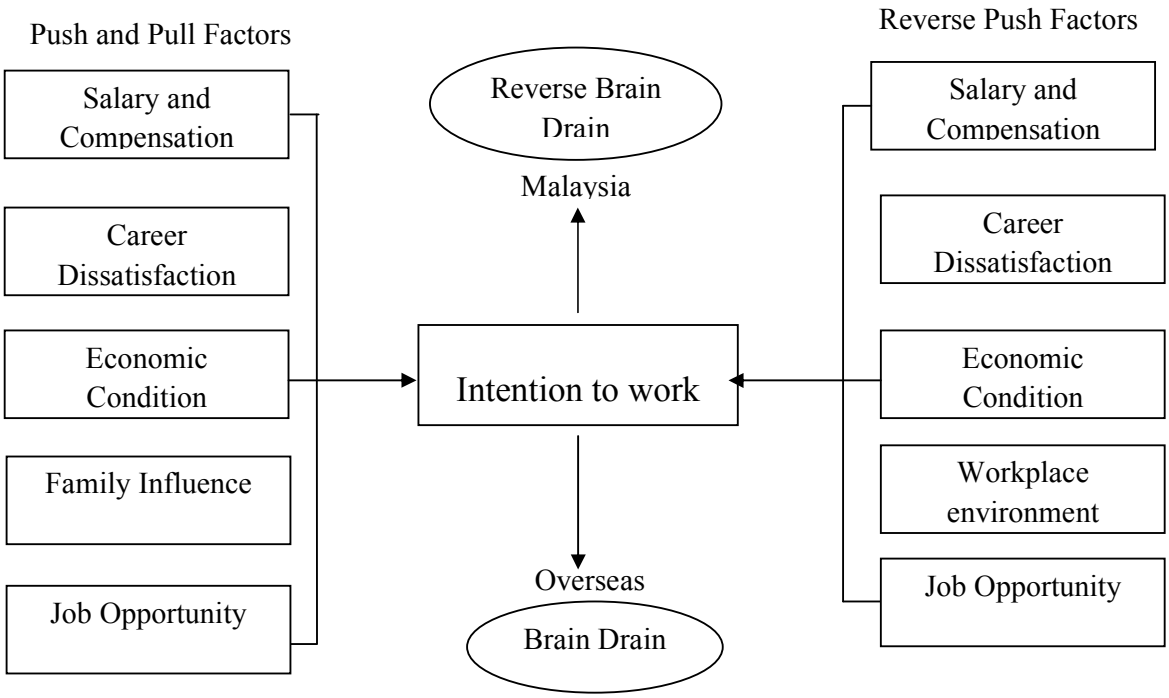


Figure 1: The proposed research model.

Reviewing the literature above, the following hypotheses are formulated:

Hypotheses

H1: There is a significant difference between students' intention to work overseas vs. local with the push and pull factors vs. the reverse push factors

H2: The students' intention to work overseas is positively related to the push and pulls factors and negatively related to the reverse push factors

METHODOLOGY

This study was carried out among the university students in Malaysia. The survey was used to gather the information from the students on their intention to work in Malaysia or overseas. The data collected were subjected to pre-data analysis before appropriate analyses were applied. In the pre-data analysis, coding and validation were conducted to determine the return rate of questionnaires. The study entailed the distribution of questionnaires to 105 respondents of which 100 were completed and returned. The rate of return for this survey stood at 95 percent.

Participants

For the participants, 47% were Malay, 34% were Chinese, 14% were Indians and 5% were others ethnicities. Of this, 36% were male and 64% were female. The majority were around 21 to 23 years old, consisting about 77% of all respondents followed by 12% below 20 years old, 8 % around 24 to 26 years old and 3% were age above 26 years old. Among these, 41% have family members or relatives working overseas. While, 58% indicated their intention to work overseas and 42% preferred to work in Malaysia

Measures

Each of the following variables was measured to examine the students' intention to work overseas or local. Two main drivers as the key players of brain drain were identified as 'the push and pull factors' and the reverse push factors.

Push and pull factors. The study identified salary and compensation, career dissatisfaction, economic condition, family influence, working environment and job opportunity as the push and pull factors. Nine items were used to test these push and pull factors. A five-Likert scale format which consist of 1 representing "strongly disagree" to 5 representing "strongly agree". Specifically, two items were used to measure salary and compensation such as "*salary level offered is still low in Malaysia*", and "*salary level offered is unequal to our profession"*, two items were used to assess the career dissatisfaction such as "*promotion opportunity in Malaysia is limited*" and "*task responsibilities are burdening and stressful in Malaysia*". Two items were used to test the economy condition such as "*unemployment rate in Malaysia is still high*" and "*level of taxation in Malaysia is very high*". Three items were used to test family influence such as "*parent will always encourage their children to work overseas"*, "*family members and relatives influenced us to work overseas*" and "*family members overseas' working experience is attractive*".

Cronbach's alpha for this variable was .90. The values for each of the items used to measure the push factor were transformed into a composite value. The composite value was used in further analysis.

Reverse push factors. The study identified salary and compensation, career dissatisfaction, economic condition, working environment and job opportunity as the reverse push factors of brain drain in Malaysia. Nine items were used to measure the push factors. A five-Likert scale format which consist of 1 representing "strongly disagree" to 5 representing "strongly agree". Specifically, one item was used to test the salary and compensation such as "*compensation package offered in Malaysia is favourable*". Two items were used to test the variable of economy condition such as "*poverty rate in Malaysia is low*" and "*economy growth in Malaysia is stable*". Only one item was used to test career dissatisfaction which was "*working hours schedule in Malaysia is flexible*" and also one item was used to measure working condition which was "*companies in Malaysia offer an excellent working environment"*. And lastly, three items were applied to test the variable of job opportunity, these were *"there are plenty of job offers in Malaysian labor market*", "*it is easy to get a better job in Malaysia equivalent to our profession*", and "*companies in Malaysia give many opportunity to their employees to work overseas*". Cronbach's alpha for this study was .90. The values for each of the items used to measure the reverse push factors were transformed into a composite value. The composite value was used in further analysis.

Intention to work overseas. The study used single item with 'yes' answer to indicate students' intention to work overseas in the future or 'no' answer to indicate their intention to work in Malaysia.

DATA ANALAYSIS

The data collected were processed and analysed using the Statistical package for the Social sciences (SPSS) program version 17.0. Univariate analysis of variance or Independent *t*-test between-group comparisons were used to test between group 1 (students' intention to work overseas) and group 2 (students' intention to work in Malaysia) on the push and pull factors as well as the reverse push factors. A p-value of <0.05 was considered statistically significant.

The result of the Independent *t*-test shows the two groups is statistically different. Table 1 depicts the result t= -14.298, p>0.05 for the reverse push factors and t=11.582, p>0.05 for the push and pull factors.

Table 1: The result of independent *t*-test analysis

Independent Samples Test

		t-test for Equality of Means						
							95% Confidence Interval of the Difference	
		t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Reverse Push Factors	Equal variances assumed	-14.298	98	.000	-2.164	.151	-2.465	-1.864
	Equal variances not assumed	-13.054	57.671	.000	-2.164	.166	-2.496	-1.832
Push and Pull Factors	Equal variances assumed	11.582	98	.000	1.829	.158	1.516	2.143
	Equal variances not assumed	12.738	89.278	.000	1.829	.144	1.544	2.115

The overall descriptive statistics and correlations of the variables of the study are shown in Table 2. Most coefficients are in the commonly acceptable range for Cronbach alpha values according to Nunnally (1978). For testing the hypotheses, this study applied a regression analysis as the main method of analysis. In this study, the variance inflation factor (VIF) for the push and pull factors and the reverse factors are both 1.128. This suggests that multicollinearity does not appear to be a major problem.

Table 2: The Descriptive and correlations of the push and pull factors

	Mean	SD	1	2	3
1. Intention to work overseas/Malaysia	1.58	0.496			
2. Push and pull factors	3.62	1.306	.822**.90		
3. Reverse push factors	3.51	1.194	-.760**	.337**.90	

***Correlation is significant at the 0.01 level (2-tailed).*

The regression analysis was performed to test the second hypothesis of the study. Specifically, to test the second hypothesis, the study regressed the intention to work overseas/Malaysian on the push and pull factors as well as the reverse push factors. The relationship is highly significant as indicated in Table 3 (R^2 = 0.939 $p<0.05$). The null hypothesis for the hypothesis is therefore rejected. The intention to work overseas or Malaysia explains about 93.90 percent of the variance in the push and pulls factors and the reverse push factors.

Table 3: Regression Analysis with dependent variable – intention to work overseas/Malaysia

Coefficients	Unstandardized coefficient B	*SE*	Standardized coefficients Beta	*t*	Significance
Constant	1.497	.063		23.897	.000
Push and Pull factors	.243	.010	.639	24.077	.000
Reverse Push factors	- .227	.011	- .545	-20.553	.000

R=.969; R^2=.939; Adjusted R^2:.938; SE of the estimate=.1232

FINDINGS

The aims of this study are two-fold. First, it sets out to examine the students' intention to work overseas or Malaysia especially after the efforts done by the Malaysian government to reverse the push factors. And secondly, the present study attempts to test to what extent the push and pull factors that have led many Malaysians to migrate have been successfully reversed in the current year.

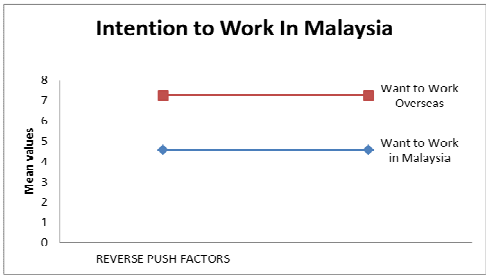


Figure 3: The Push and Pull Factors

Hypothesis 1:

The result of the Independent *t*-test shows that there is a significant difference between the students' intention to work overseas vs. local with the push and pull factors vs. the reverse push factors. The *t*-test indicates that the reverse push factors has a negative relationship with the push and pull factors.

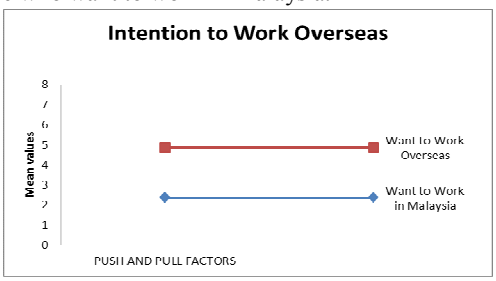
Hypothesis 2:

The study found that the push and pull factors have significantly a positive relationship with the intention to work overseas (*Beta* = 0.243). On the other hand, the reverse push factors show a negative significant relationship with the students' intention to work overseas (*Beta* = - 0.227).

RESULTS

The means, standard deviations and standard error of mean show the majority of the respondents intend to work overseas due to the push and pull factors. On the other hand, those who want to work in Malaysia are because of the reverse push factors taking place in the home country.

Figure 2 indicates the students' intention to work in Malaysia due to the reverse push factor is slightly higher than those who want to work overseas. Figure 3 depicts the students' intention to work overseas due to the push and pull factors, is slightly higher than those who want to work in Malaysia.



DISCUSSION AND CONCLUSION

The present study researched the students' perception on their intention to work overseas or local. The findings show that many Malaysians intend to work overseas because of push and pull factors such as attractive pay, career satisfaction and also because of economic condition. However, the study also shows that the reverse push factors help to affect the students' preference to work in the home country. The major findings of this study indicate a negative relationship existed between the push and pull factors and the reverse push factors. This means that the reverse push factors can help in attracting more Malaysians from migrating overseas.

The findings of the study show that the brain drain can be reversed as what happened to China, South Korea, Taiwan and India. Brain drain is also

spontaneously reversed when the economy of the countries progressed. Malaysia is envisaged to be a high income nation by the year 2020. Therefore, the efforts undertaken by the Malaysian government could reverse the occurrence of its brain drain. However, brain drain also happens to the developed country (Ang, 2012). Having said so, cautions should be taken into consideration to not be too optimistic as the effect of the reverse push factors may be temporary and unstable causing by uncertainty in the economic conditions and stability of the country. Furthermore, the pull factors of the brain drain are beyond the control of the home country.

The findings of the study would be useful to the researchers, policy makers, economists and academicians on the initial effective measures applied to curb and bypass further brain drain. This study also should be of interest to government ministries dealing with education to provide ample employment opportunities for students after finishing their studies. To summarize, the main factors contributing to the reverse push factors in this study are the students' intention. The direction of this intention may be changed depending on the economic condition and home country stability at the time. Therefore, it should be kept in mind that the current study examined only students' intention not their actual behaviour.

LIMITATIONS AND FURTHER RESEARCH

The finding can be further strengthening if the sample frames were drawn from bigger population and universities. About 20 colleges, 18 public and 37 private universities in Malaysia and many Malaysians are studying overseas which should also be included in order to get a bigger picture of this issue. In other words, although this study specifically aims to examine the local universities students on their intention to leave the countries after the introduction of TalentCorp, Malaysians who are studying overseas also contributed to the Malaysia's brain drain. By having more data frame, could strengthen the findings of this study.

This study also used students' perception of intention to work overseas or local, which means that they may or may not be actually working overseas or local as indicated in this survey. The present study justified the used of students' intention based on the theory developed by Fishbein and Ajzen (1975) and Ajzen and Fisbein (1980) which have been proven useful and acceptable by many scholarly research (such as Baruch et al, 2007; Baruch 1995) in the past in justifying the used of intention to predict the actual behaviour. However, only the data from longitudinal research can adequately disentangle the answer in which the students will be reassessed in 5 to 10 years in time to determine the actualization of their intentions.

REFERENCES

Ajzen, I.1991. The theory of planned behaviour: Organizational behaviour and Human Decision Processes, 50():179-211.

Ajzen, I. and Fishbein, M.1980. Understanding attitudes and predicting social behaviour. Prentuce Hall, U.S.A.

Ang,W.C. 2012. Determinant of brain drain and the impact of new economic model-the case of Malaysia. MBA Thesis, University Sains of Malaysia, Malaysia.

Baruch, Y. 1995. Business globalization—the human resource management aspect. Human System Management, 14 (4): 313-326.

Baruch, Y., Budhwar, P.S. and Khatri, N. 2007. Brain drain: inclination to stay abroad after studies. Journal of World Business, 42(1):99-112.

Bjorkman, I., and Fan, X. C. .2002. Human resource management and the performance of Western firms in China. International Journal of Human Resource Management, 13(6): 853–864.

Brockhaus, R.H. 1980. Risk taking propensity of entrepreneurs. *Academy* of Management Journal, 23 (3):509-520.

Crush, J. 2002. The global raiders: Nationalism, globalization and the South African brain drain. Journal of International Affairs, 56 (1): 147–172

Deckop, J. R. 1998. Determinants of chief executive officer compensation. *Industrial & Labor Relations Review, 41*(2): 215-226.

Finn, M. G. 2010. Stay rates of foreign doctorate recipients from U.S. universities, 2007. Oak Ridge Institute for Science and Education, Oak Ridge, TN:

Fishbein, M. and Ajzen, I. 1975. Belief, attitude, intention and behavior. Reading Mass, Addison Wesley.

Foo, G. 2011. Quantifying the Malaysian brain drain and an investigation of its key determinant. Malaysian Journal of Economic Studies, 48(2):93-116.

Geeson, M. 1998. Brain hemorrhage. The New Republic:14-16

Gerhart, B. And Milkovich, G. T. 1992. Employee compensation: research and practice. In M. D. Dunnette & L. M. Kough (Eds.), *Handbook of industrial and organizational psychology*

(2nd ed., Vol. 3, pp. 481-569). Palo Alto, CA: Consulting Psychologists Press.

Ghoshal, S., Piramal, G., and Budhiraja, S. 2001.World class in India. Penguin Books, New Delhi.

Gupte, M. and Jadhav, K. 2014. The concept of reverse brain drain and its relevance to India. International Monthly Refereed Journal of Research In Management & Technology, 3(1):83-87.

Haylock, J. 2005. Where have all the accountants gone? Chartered Accountants Journal, 84(2): 19-20. Available: http://www.channelnewsasia.com/ cpasingapore/topchallenge.htm

Iredale, R.R.1999. The need to import skilled personnel. International Migration, Special Issue: Migration and Development, 37(1):89-123.

Javed, I.S. 2011. Brain drain: why people leave their motherland? Journal of managerial Sciences, 5(1):63-74.

Junaimah, J. and Yusliza, M.Y. 2011. Propensity to leave by Malaysian professionals. International Journal of Innovation, Management and Technology, 2(2):119-122.

Khalil, M.N. and Pearson, J.M. 2006. An empirical study of internet banking acceptance in Malaysia: an extended decomposed theory of planned behaviour. IAMOT, 1-8

Korner, H.1998. The rain drain from Developing Countries-an Enduring Problem
Intereconomics, 33(1): 26-29

Lewin, K. 1951. Field theory in social science. Harper & Row, U.S.A.

Lowell, B.L. and Findlay, A.M. 2001. Migration of highly skilled persons from developing countries Impact and policy responses: draft synthesis report, report prepared for the International Labor Organization (June).

Maimunah, I., Kunasegaran, M. and Roziah, M.R. 2014. Evidence of reverse brain drain in selected Asian countries: human resource management lesssons for Malaysia. Organizations and Markets in Emerging Economies, 5(1):31-48.

Malaysia Economic Monitor. 2011. Brain drain. Retrieved from https://www.scribd.com/doc/127309985/Malaysia-Economic-Monitor-BRAIN-DRAIN-Apr2011-Full

Mittal, R. 2005. The hottest jobs, the fattest salaries. Hindustan
Times.com. Retrieved from http://www.hindustantimes.com/news/181_1436035, 0002.htm?headline=The_hottest.

Murphy, K. J.1999. Executive Compensation, in Orley Ashenfelter and David Card, eds., *Handbook of Labor Economics*, Vol. III, North Holland.

Nunnally, J. O. 1978. Psychometric theory. McGraw-Hill, U.S.A

Oxford Dictionary. 2014. Brain drain. Oxford University Press, UK. Retrieved from www.oxforddictionaries.com/definition/english/brain-drain?q=brain+drain.

Panahi, G. 2012. Factors driving Iranian graduates to immigrate to other countries. Journal of American Science, 8(5):187-193

Portes, A. 1976. Determinants of the brain drain. International Migration Review Nr., 4(1):489-508.

Quah, C.H., Siti Rohaida, M.Z. and Chai, G.E. 2014. Return intention of Malaysia's dispora: the push and pull factors, 1(1):140-149.

Randstad Workmonitor. 2012. Malaysian employees say salary is more important than job satisfaction. Retrieved January 20, 2013 from http://www.randstad.com.my/about-randstad/the-world-of-work/malaysian-employees-say-salary-is-more-important-than-job-satisfaction

Ravendran, A. 2008. Brain drain or global mobility? Accountants Today. January.
Ryan, O. (2005). India's top export: Headed back home? Fortune, 151(12): 30.

Schellenkens, P. 2011. Whiter Malaysia's brain drain? The World Bank Retrieved from http://blogs.worldbank.org/eastasiapacific/whither-malaysia-s-brain-drain.

Starbizweek. 2011a. Migration of talent-how Malaysia stem the tide, April 30.
Starbizweek.2011b. Malaysia's got talent. February 12.

Starbizweek. 2011c. Blueprint needed. February 12.
TalentCorp Malaysia. 2011. TalentCorp Malaysia. Retrieved from http:// www.talentcorp.com.my/about-us/

TalentCorp Malaysia. 2012. Talent Roadmap 2020. Retrieved from http://www.talentcorp.com.my /2012/04/24/talentroadmap2020/

Tansel, A. and Gungor, N.D. 2003. Brain drain' from Turkey: survey evidence of student non-return, Career Development International, 8(2): 52-69.

Tavakol, M. 2012. Brain Drain: Problems and Solutions. Islamic Perspective, 7(1):161-171

The Department of Statistics Malaysia, 2013. Econnomic characteristics of the population 2010. Retrieved from http://www.statistics.gov.my /portal/index.php?option=com_content&view=article &id=2227%3Acharacteristics-of-the-population-2010-&catid=129%3Aonline-publications&lang=en

The Business Week, 'The Reverse Brain Drain Low visa quotas and delays may be sending highly skilled and entrepreneurial immigrants back home—to work for U.S.competitors', 22 August, 2007.

The Malaysia Insider, 'Scheme to stem brain drain will backfire, drive more Malaysians abroad, says economist', 7 July 2014.

The Malay Mail, 'Exploring solutions to solve Malaysia's brain drain challenge', 27 May, 2014.
The Malaysian Reserve, 'Incentives to reverse the brain drain', 7 July 2014.

The New Straits Times, 'Accountants see better deal abroad', 8 September, 2007.

The Star, 'A fair for accounting graduates', 15 May, 2008.

The Star, 'Pressing brain drain issue', 9 July, 2007.
The Wold Bank. 2011. Malaysia economic monitor-brain drain- April. Retrieved from http://siteresources.worldbank.org/INTMALAYSIA/ Resources/324392-1303882224029/malaysia_ec _monitor_apr2011_full.pdf

Tyson, A.D. 2011. Ethnicity, education and the economics of brain drain in Malaysia youth perspectives, 48(2): 175–184.

Wild, J., Wild, K., and Han, J. 2010. International Business. The Challenges of Globalization, 5th Edition. Pearson Education Inc, U.S.A.

Winston, L.T.L. 2014. Framing the Malaysian brain drain: A comparison between the reporting dtyles of The Star Online vs Malaysiakini. The Journal of the South East Asia Research centre for Communications and Humanities, 6(1):97-121.

Wong, E. 2010. Why is Malaysia experiencing a brain drain?, Retrieved from http:// asiapacific.anu.edu.au/newmandala/2010/12/20/why-is-malaysia-experiencing-a-brain-drain/

Xue, P. 2012. Why does overseas Chinese talent intend to return?: A case study on the determinants of return-intentions of Chinese talent in Japan. Working Paper Series Vol. 2012-08-*The International Centre for the Study of East Asian Development,*

Zeithammer, R. and Kellogg, R. 2010. The hesitant hai-gui: a conjoint analysis of job preferences among U.S.-educated Chinese scientists and engineers. *Working Paper Series* 2010.09.01, Anderson School of Management, University of California, Los Angeles.

Zimmerman, W. 1987. Open borders, nonalignment, and the political evolution of Yugoslavia. Princeton University Press, Princeton N J.

Zigura, C. and Law, S. 2009. Recruiting international students as skilled migrants: the global 'skills race' as viewed from Australia and Malaysia. Globalisation, Societies and Education, 4(1):59-76.